

the June sucker, and affect portions of Utah Lake resulting in habitat loss for the species while potentially increasing habitat for exotic species. This determination will provide opportunities for protection and management under the Endangered Species Act of 1973, as amended.

EFFECTIVE DATE: April 30, 1986.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Regional Endangered Species Office, U.S. Fish and Wildlife Service, 134 Union Boulevard, fourth floor, Lakewood, Colorado and the Endangered Species Office, U.S. Fish and Wildlife Service, 2078 Administration Building, 1745 West 1700 South, Salt Lake City, Utah 84104-5110.

FOR FURTHER INFORMATION CONTACT: Mr. Robert G. Ruesink, Field Supervisor, Endangered Species Staff, U.S. Fish and Wildlife Service, 2078 Administration Building, 1745 West 1700 South, Salt Lake City, Utah 84104 (801/524-4430 or FTS 588-4430).

SUPPLEMENTARY INFORMATION:

Background

The June sucker (*Chasmistes liorus*) is endemic to Utah Lake in Utah and uses the lower portion of the Provo River, the largest tributary of Utah Lake, for spawning and larval rearing. Utah Lake is a 38,000 hectare (94,000 acres) (approximately 38 kilometers (23.6 miles) long and 21 kilometers (13 miles) wide at the maximum points) remnant of ancient Lake Bonneville. The lake is shallow, slightly saline, turbid, and highly eutrophic, and is the largest freshwater lake located entirely in Utah. The lake has an average depth of 2.9 meters (9.5 feet) and a maximum depth of 4.2 meters (13.8 feet). In 1885, the compromise elevation (maximum level to which Utah Lake would be allowed to fill) was established at 1,368.35 meters (4,489.34 feet) (Radant and Sakaguchi, 1981).

The June sucker was first collected and described by David S. Jordan in 1878 (Jordan, 1878). The common name June sucker is based on the fact that peak spawning time for this species occurs during the month of June. Some confusion has existed over the systematics of Utah Lake suckers in recent years. It has been reported that at least three species of suckers occurred in Utah Lake (Stubbs, 1966; Lowder, 1951; and Jordan, 1878). However, recent information presented by Miller and Smith (1981) suggested that only two species, the Utah sucker (*Catostomus ardens*) and the June sucker occurred in Utah Lake. June suckers are readily

distinguished from Utah suckers by their subterminal mouth, relatively smooth divided lips, broad skull, and greater numbers of gill rakers. The June sucker spawns in June while Utah suckers spawn in early April (Radant and Hickman, 1984).

Recently, Miller and Smith (1981) concluded that the June suckers present in Utah Lake today are different from the June suckers collected prior to 1900. They have hypothesized that the June and Utah suckers hybridized during the 1932 to 1935 drought when fish populations were stressed. As June suckers returned to abundance, the new genes were incorporated into the population and have become normal characteristics. They have assigned the name *Chasmistes liorus liorus* to specimens collected in the late 1800's and *Chasmistes liorus mictus* to specimens collected after 1939. However, to avoid confusion, this final rule is viewing the June sucker as a full species, since it has maintained its distinctiveness from other suckers and is not known to hybridize with any species today.

Decline in abundance of June suckers can be attributed to habitat alteration through dewatering and degrading water quality, competition and predation by exotic species, commercial fishing, and killing of the adults during the spawning run.

Historically, the June sucker was very abundant in Utah Lake. Jordan (1891) reported millions of suckers existing in the lake when he visited there in 1889. As a result of this visit, he proclaimed Utah Lake as: ". . . the greatest sucker pond in the universe." In the late 1800's it was estimated that 361 metric tons (398 tons) of spawning suckers were killed in 3.3 kilometers (2.1 miles) of the Provo River due to dewatering (Carter, 1969). Carter (1969) again reported that 2.3 metric tons (2.5 tons) of suckers were removed from a dewatered irrigation ditch during the early 1920's.

Utah Lake suckers were an important part of the total commercial fish harvest until their numbers became too low. Cope and Yarrow (1875) reported that the June sucker was extremely numerous and the fishermen considered them a nuisance; however, they sold readily in the winter for an average price of 2½ cents per pound (Cope and Yarrow, 1875, reported that fresh trout were selling for 30 cents per pound during this same period). In the early 1900's, commercial fishermen were still reporting large catches of suckers annually. Between 1901 and 1905, an average of 162 metric tons (178.6 tons) of suckers were harvested annually

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Final Rule Determining the June Sucker (*Chasmistes liorus*) To Be an Endangered Species With Critical Habitat

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service has determined the June sucker (*Chasmistes liorus*) to be an endangered species and has designated its critical habitat under the authority of the Endangered Species Act of 1973, as amended. The June sucker occurs only in Utah Lake, Utah, and its major tributaries. It uses the lower portion of the Provo River, the largest tributary of Utah Lake, for spawning and larval rearing. It is threatened with habitat alteration through dewatering and degrading water quality, competition and predation by exotic species, and killing during the spawning run. Also, it has been suggested that the Central Utah Project (portions of the Bonneville Unit), presently under construction, could impact this species by reducing and changing flows in the Provo River, the major spawning site of

(Carter, 1969). Large numbers of suckers were still being caught in the early 1950's; Lowder (1951) reported that in 1951, as many as 1,350 suckers could still be taken in a single day of commercial seining. Today, few, if any, suckers are captured in the nets of commercial fishermen in Utah Lake.

Hundreds of tons of suckers were lost during the 1932 to 1935 drought due to crowding and freezing when irrigation practices nearly drained Utah Lake dry (Tanner, 1936). Tanner (1936) reported that in the spring of 1935 there were no suckers running up the Provo River to spawn. "Something that had never happened before in the history of Utah Lake."

In 1951 suckers were still considered to be the second most abundant species in Utah Lake. However, the 1959 suckers were the fourth most abundant species in the lake with gillnet catch rates of 0.16 suckers per net hour (Arnold, 1959). Similar gillnetting efforts in 1970 captured only 0.01 suckers per net hour (White and Dabb, 1970). During this 1970 study, suckers were reported to be the sixth most abundant species in the lake.

An intensive inventory of the Utah Lake fishery during 1978 and 1979 using a variety of sampling gear resulted in 2,097 separate net collections which captured 34,292 adult fish. However, only 102 (0.3 percent of the total catch) were identified as June suckers, while only 18 were identified as Utah suckers. The Utah sucker is still abundant in areas outside Utah Lake. No young-of-the-year suckers were taken during the study. Gillnetting collections during this study produced no suckers (Radant and Sakaguchi, 1981).

The decline of sucker numbers to present levels appears to correspond closely with the introduction of white bass and walleye in the mid-1950's. Competition and predation from exotic species is one of the serious threats to the survival of the June sucker. Over 20 exotic fish species have been introduced into Utah Lake during the past 100 years. Radant and Sakaguchi (1981) reported that the most successful introductions of exotic species have been with the carp (1886), largemouth bass (1890), black bullhead (1893), channel catfish (1919), walleye (1955), and white bass (1956). The dominant fishes in Utah Lake today are the white bass, walleye, channel catfish and carp, all exotic species.

Prior to 1978, biological information for the June sucker was virtually nonexistent, and even today much remains to be learned about this species. Due to its rarity, few biological data have been collected pertaining to its life history requirements in the lake. Much

of the information pertaining to biological requirements of the species deals with the spawning and larval rearing period in the Provo River. June sucker spawning is restricted primarily to the Provo River, with limited spawning possibly occurring in the Spanish Fork River, (Radant and Sakaguchi, 1981; Shirley, 1983; Radant and Hickman, 1984). The adult June sucker ascends the Provo River during the second or third week of June and completes spawning within 5 to 8 days. It can travel as far as 7.8 kilometers (4.9 miles) upstream to a diversion barrier that bars further upstream movement. Spawning occurs throughout the reach of river below the diversion barrier. Details on spawning behavior, habitat, water velocities, hatching time, larval development, etc., can be found in papers by Shirley (1983) and Radant and Hickman (1984).

Young-of-the-year June suckers have been collected in the Provo River up to five months after hatching. However, no young-of-the-year or juvenile suckers are known to have been collected from Utah Lake in recent years. Accurate population estimates for the June sucker have not been made. It is suspected that there are less than 1,000 adults (based upon spawning run estimates) today. They all appear to be over 15 years in age. It is possible that the June sucker population existing today is very old, with little or no recruitment occurring.

Past actions affecting this taxon began on December 30, 1982, when the Service included the June sucker in a notice of review published in the **Federal Register** (47 FR 58456). This notice pertained to vertebrate species that were currently under review for listing as endangered or threatened. This notice indicated that substantial information was available to support the biological appropriateness or proposing to list this species as endangered or threatened. On April 12, 1983, a petition was received by the Service from the Desert Fishes Council requesting that the June sucker be listed as an endangered species. A notice of finding on this petition was published by the Service in the June 14, 1983, **Federal Register** (48 FR 27273). This notice stated that the petition was accepted and that the Service had one year from the date that the petition was received to publish its findings in the **Federal Register**. On July 2, 1984, the Service published a proposed rule (49 FR 27183) to list the June sucker (*Chasmistes liorus*) as an endangered species with critical habitat, in accordance with Section 4(b)(3)(B)(ii) of the Act.

Summary of Comments and Recommendations

In the July 2, 1984, proposed rule (49 FR 27183) and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. A newspaper notice was published in the Provo, Utah, *Daily Herald* on July 30, and August 6, 13 and 20, 1984, which invited general public comment. Four comments were received and are discussed below.

Comments were received from the Governor of Utah, the Bureau of Reclamation, the Central Utah Water Conservancy District, and the Provo River Water Users Association.

The Governor of Utah agreed that the June sucker (*Chasmistes liorus*) met the criteria prescribed for listing by the Endangered Species Act. He urged the Service to expedite the listing process and make funds available to develop and implement a recovery plan.

The Central Utah Water Conservancy District (CUWCD) and Provo River Water Users Association (PRWUA) pointed out the taxonomic confusion over Utah Lake suckers and doubted that laymen could distinguish between the June sucker (*Chasmistes liorus*) and the Utah sucker (*Catostomus ardens*). The Service agrees that the taxonomic status of suckers in Utah Lake was confusing until Miller and Smith (1981) clarified the problem. They provide several distinguishing characteristics between the two species. A public information program could be part of a recovery plan for the June sucker.

The Bureau of Reclamation (BR), CUWCD and PRWUA questioned the statement that listing the June sucker was compatible with development of the Central Utah Project (CUP). The Service agrees that this statement is confusing and should have stated, in effect, that listing could be compatible with CUP provided that certain modifications and conservation measures could be developed to protect and enhance June sucker survival. However, the question of any Federal action jeopardizing the continued existence of proposed or listed species or adversely affecting critical habitat would be determined on a case-by-case basis through the consultation process under Section 7 of the Endangered Species Act of 1973, as amended.

BR and CUWCD pointed out that some systems of the CUP may increase spring and summer flows in the Provo River, thereby enhancing June sucker spawning and young-of-the-year survival. The Service agrees that increased flows in the Provo River during spring and summer could be beneficial to the June sucker.

The CUWCD and PRWUA questioned that water diversion and upstream impoundments are the main threats to June sucker survival. They cite continued survival of the June sucker following most of the water diversions at the turn of the century and the apparent recovery of the species following the drought conditions of the 1930's. Carter (1969) reported instances where water diversions killed suckers in the Provo River and irrigation ditches. Tanner (1936) reported hundreds of tons of suckers killed when irrigation practices nearly drained Utah Lake between 1932 and 1935. As a result, in the spring of 1935 there were no suckers running up the Provo River to spawn; something that had never happened before in the history of Utah Lake (Tanner 1936). Thus, the Service feels that water diversions have in the past and potentially could in the future threaten June sucker survival. Upstream impoundments could benefit June sucker spawning and young-of-the-year survival by releasing optimal amounts of water at critical times.

The CUWCD and PRWUA doubted that the killing of June suckers is a significant factor in their decline since it has occurred for decades. The Service agrees that the killing has probably occurred for a long time, but feels that it is a significant mortality factor with the current low numbers. Protection given the species by the State of Utah has not prevented this killing.

The CUWCD, PRWUA, and BR felt that predation by white bass and walleye in Utah is the main threat to June sucker survival and that listing will not remove this threat. The Service agrees, but listing is followed by recovery planning and actions. The State of Utah is currently implementing portions of its June Sucker Management Plan to ensure the survival of the species and attempt to overcome the impacts of predation. Section 7 consultations could also ensure that Federal projects would not benefit the predator species at the expense of the June sucker.

The CUWCD and PRWUA felt strongly that the economic impacts of listing and recovery should be published for public review and comment prior to proceeding with listing. An economic analysis of designating critical habitat is

a part of this final rule. The cost breakdown of recovery actions for State and Federal governmental agencies will be included in the recovery plan when it is finalized. The final recovery plan will be made available to the public.

Both the CUWCD and PRWUA felt that important data are currently lacking, without which listing should not proceed. The Service feels that the drastic decline in June sucker numbers, the apparent lack of recruitment to the population, and the threats of predation and habitat alteration warrant listing the June sucker as an endangered species with critical habitat.

The BR questioned designating the Spanish Fork River as critical habitat because instream diversions block access and virtually dewater the stream in July and August. June suckers in spawning condition have been captured in the Spanish Fork River during the month of June, but no young-of-the-year June suckers have been found. Much of the habitat below major diversions consists of a silt substrate which is not suitable for spawning. Therefore, based on this biological information and reevaluation of the Spanish Fork River proposed critical habitat, and Service agrees with BR and is removing the Spanish Fork River from consideration as critical habitat.

The CUWCD and PRWUA pointed out that measuring critical habitat from the rivers' confluence with Utah Lake is impossible with the current high water level of Utah Lake. The Service agrees and the upper limit of critical habitat on the Provo River is now defined by the Columbia Lane (Tanner Race) diversion in the SW $\frac{1}{4}$, NE $\frac{1}{4}$, SW $\frac{1}{4}$, section 36, T6S, R2E SLB&M, which represents a barrier to any further upstream movement.

Section 4(b)(5)(E) of the Endangered Species Act of 1973, as amended, requires that a public hearing be held, if requested within 45 days of the publication of the proposed rule. On August 14, 1984, the Service received requests for a hearing on the June sucker from Attorney Dave McMullin, Payson, Utah, on behalf of the East Bench, Lake Shore, Lake Side, Salem, South Field, and West Field Irrigation Companies. Additional requests for a hearing were received from Mayor James E. Ferguson, Provo, Utah and the Central Utah Water Conservancy District, Orem, Utah.

Subsequently, a notice of public hearing and reopening the comment period was published in the September 25, 1984, *Federal Register* (49 FR 37649). A newspaper notice was published in the Provo, Utah, *Daily Herald* on September 17 and 24, and October 1 and 8, which announced the public hearing

and reopened the comment period until October 21, 1984.

The public hearing was held October 11, 1984, from 6 p.m. to 9 p.m., at the Provo City Building, the City Council Chambers, 359 W. Center Street, Provo, Utah.

A total of thirteen statements were received at the public hearing from: Dave McMullin, an attorney representing the Spanish Fork West Field Irrigation Company, Spanish Fork South Field Irrigation Company, Spanish Fork East Bench Irrigation Company, Lake Shore Irrigation Company and Salem Irrigation Company; Leland Gamette, representing Mayor Ferguson of the City of Provo, Utah; Lynn Ludlow, general manager and secretary for the Central Utah Water Conservancy District; Marion Hinckley; William Loy, a commercial fisherman; C. Neal Sorensen; Margaret Rasmussen, neighborhood chairman for the Fort Utah Neighborhood in Provo; Phil Edwards; Jim Pissot, president of the Utah Audubon Society; Dorothy Harvey; Peter Hovingh, representing the Utah Nature Study Society and Federation of Western Outdoor Clubs; Hugh McKellar, superintendent for the Provo River Water Users Association; and Ray Aitken.

Mr. Ludlow raised several questions about the taxonomic status of the June sucker, i.e., is it a true species, how can it be distinguished from the Utah sucker and are suckers with June sucker characteristics found in other waters? The Service believes that the taxonomic confusion was clarified by Miller and Smith (1981); they give several distinguishing characteristics between Utah and June suckers, recognize the June sucker as a distinct taxon, and in their searching have not found *Chasmistes liorus* in any other location. Mr. McKellar shares the belief that more effort should be made to determine if June suckers are found elsewhere. While the possibility of other June sucker populations exists, the Service feels that a considerable effort has been made through searching collections and contacts with university and State wildlife agencies to locate other June sucker populations, and the probability of finding a new population is very low.

Mr. Ludlow disagreed with statements in the proposed rule that alteration of habitat due to water impoundments, irrigation, killing of spawning adults, water pollution and development of the Central Utah Project (CUP) are threats to June sucker survival. Carter (1969) documents instances where suckers were killed by water diversions and killing has continued in spite of

protected status by the State of Utah in 1983. The CUP has the potential to affect June suckers by removing lake habitat and altering flows in the Provo River (Radant 1983). The Service believes that the evidence is contrary to Mr. Ludlow's position.

Mr. Ludlow believed that predation by white bass and walleye in Utah Lake is the reason for decline of the June sucker and that listing is meaningless until this problem is resolved. The Service agrees that predation is a major factor in the lack of recruitment to the June sucker population, and that listing, by itself, will not remove the predators. However, listing allows recovery planning and activities which attempt to remove threats and recover the species. Failing to list the June sucker, which is drastically declining in numbers, would be avoiding Service responsibilities under the Endangered Species Act. Threats to the June sucker are complex and not easily removed; therefore, a cooperative agreement in lieu of listing, as Mr. Ludlow suggests, is not being pursued.

Mrs. Rasmussen opposed listing of the June sucker because she fears her neighborhood would be flooded if dredging the Provo River is prohibited. Listing the June sucker would not expressly prohibit dredging. If the dredging would be done by a Federal agency or if Federal permits were required, the project impacts would be analyzed under provisions of section 7 of the Endangered Species Act, as amended. State or private dredging would not require section 7 consultation if there was no Federal involvement. The Service believes that section 7 offers the flexibility to deal with situations such as flooding without causing undue risk to human life or property.

Mr. Pissot, Ms. Harvey and Mr. Hovingh gave statements supporting listing the June sucker and designating critical habitat. Additionally, Mr. Hovingh recommended designating the entire Utah Lake as critical habitat. While the entire lake is presently occupied by June suckers, the Service feels that current information indicates that critical habitat designation is only necessary for spawning and larval rearing areas. The Service will evaluate all new information that indicates changes, additions, or deletions to critical habitat, as needed in the future.

Mr. McMullin, Mr. Ludlow, Mr. Loy, Mr. Sorensen, and Mr. Aitken questioned designating the Spanish Fork River as critical habitat, citing access barriers and poor habitat conditions. The Service agrees with this position

and is removing the Spanish Fork River from designated critical habitat.

Mr. Gamette, Mr. McKellar, and Mr. Ludlow questioned designating the Provo River as critical habitat citing the predation problem and need for economic analysis. The lower 7.8 kilometers (4.9 miles) of the Provo River is the only area where June sucker spawning has been documented and young-of-the-year found. If a self-sustaining June sucker population is to continue in Utah Lake, this spawning and rearing habitat must be protected. An economic analysis of designating critical habitat for the June sucker was prepared in conjunction with this rule.

Mr. Gamette, Mr. Ludlow, and Mr. McKellar felt that the data are currently inadequate and incomplete and do not justify listing the June sucker as an endangered species. The Service feels that the drastic decline in the June sucker population, and apparent lack of recruitment, threats posed by predators, and habitat alteration all support the need for urgent listing of the June sucker as an endangered species with critical habitat. New information will continually be sought during listing and recovery programs.

Five comments were received after reopening the comment period until October 21, 1984, from: the Bonneville Chapter of the American Fisheries Society; Dennis K. Shiozawa, assistant professor of zoology, Brigham Young University; Mr. Karl H. Alleman; Peter Hovingh, Utah vice president, Federation of Western Outdoor Clubs; and Hugh McKellar, superintendent, Provo River Water Users Association.

The comments of Mr. McKellar and Mr. Hovingh are very similar to their statements at the public hearing, and have already been addressed.

The Bonneville Chapter, American Fisheries Society, felt that existing data clearly indicate the future existence of the June sucker is in jeopardy. The Chapter urges prompt action by the Service to protect the June sucker under the Endangered Species Act and fund recovery actions.

Dr. Shiozawa supported additional study of the June sucker in Utah Lake. He feels that the diking of Goshen Bay (a proposed element of the Bonneville Unit, Central Utah Project) would adversely affect the June sucker population. Mr. Alleman feels that diking Goshen Bay and Provo Bay will improve Utah Lake for the June sucker. Radant (1983), in analyzing impacts of the Bonneville Unit, CUP, reported habitat losses for the June sucker resulting from diking Provo and Goshen

Bays. The Service agrees with Mr. Radant.

Dr. Shiozawa doubted that the Spanish Fork River provides essential habitat for the June sucker, but stresses the importance of the Provo River to the species. The Service has already responded to concerns about the Spanish Fork River proposed critical habitat in previous comments.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the June sucker (*Chasmistes liorus*) should be classified as an endangered species. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (50 CFR Part 424) were followed. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the June sucker (*Chasmistes liorus*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Alteration of habitat has been a major factor in the decline of this species. Currently, the main threats to the June sucker are (1) habitat modification through the diversion of water for irrigation, municipal, and industrial purposes; and (2) the possibility of habitat modification from upstream impoundments associated with the Central Utah Project. Alteration of habitat through water diversions and intermittent releases from upstream impoundments could seriously impact the spawning habitat of the June sucker. If a large volume of water was diverted during a drought year, it could adversely modify the lake habitat.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Killing of the adult June suckers occurs during the spawning migration. This is done with guns, arrows, rocks, nets, etc. Although the State of Utah has included this species on its protected list, illegal killing still occurs, especially during low water years. The species is very vulnerable during this time period. It is possible that a majority of the entire June sucker population is concentrated in one section of the Provo River during this 3 to 4 week period. Some commercial fishing occurs on Utah Lake, but does not constitute any threat to the June sucker.

C. Disease or predation. The June sucker currently faces predation and competition from various piscivorous fishes which have been introduced into Utah Lake. The decline of sucker numbers to present levels appears to correspond closely with the introduction of white bass and walleye in the mid-1950's. Competition and predation from exotic species is one of the serious threats to the survival of the June sucker. Over 20 exotic fish species have been introduced into Utah Lake during the past 100 years. Radant and Sakaguchi (1981) reported that the most successful introductions of exotic species have been with the carp (1886), largemouth bass (1890), black bullhead (1893), channel catfish (1919), walleye (1955), and white bass (1956). The dominant fishes in Utah Lake today are the white bass, walleye, channel catfish, and carp, all exotic species.

Although parasitism is not a known problem at this time, very little information is available. More work needs to be done on impacts of various diseases on the June sucker (Hickman, 1984).

D. The inadequacy of existing regulatory mechanisms. Although the State of Utah lists the June sucker as a protected species, illegal killing still occurs. Protected species status by the State of Utah does not provide any protection for the habitat of the June sucker.

E. Other natural or manmade factors affecting its continued existence. The impact of pollution from local communities may be adversely affecting this species but more information is needed to document this threat.

The Service has carefully assessed the best scientific and commercial information available, regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list the June sucker as an endangered species. The habitat of this fish is threatened with alteration through dewatering and degrading water quality, competition by exotic species, and illegal killing during the spawning run. These threats are to the entire occupied range and are too significant to merit a listing status of "threatened." A decision to take no action would exclude the June sucker from needed protection and would be contrary to the intent of the Endangered Species Act.

Critical Habitat

Critical habitat, as defined by Section 3 of the Act means: (i) the specific areas within the geographical area occupied by the species, at the time it is listed in

accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Section 4(a)(3) of the Act requires that critical habitat be designated to the maximum extent prudent and determinable concurrently with the determination that a species is endangered or threatened. Critical habitat is being designated for the June sucker to include the lower section of the Provo River, a major tributary of Utah Lake. Included as critical habitat is the lower 7.8 kilometers (4.9 miles) of the main channel of the Provo River from the Lake upstream to the Tanner Race diversion. Based on additional biological information brought forward in written comments and at the public hearing, the Spanish Fork River is no longer included as critical habitat. Critical habitat in the Provo River remains unchanged. A measurement error, however, was made in estimating the Provo River portion of proposed critical habitat. The recalculated estimate for the length of the Provo River proposed critical habitat is 7.8 kilometers (4.9 miles). This recalculation does not change the boundaries of the Provo River portion of critical habitat originally described in the proposed rule. This section of the Provo River is located in Utah County, Utah. The upper limit is defined as the Columbia Lane (Tanner Race) diversion in the SW $\frac{1}{4}$, NE $\frac{1}{4}$, SW $\frac{1}{4}$, section 36, T6S, R2E SLB&M. While the June sucker is found throughout Utah Lake, this area is vital to its reproduction and requires special management considerations. In the future, however, suitable habitat in Utah Lake and additional sections of the Provo River could be proposed as critical habitat if it is found to be essential to the conservation of the species.

Section 4(b)(8) requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those activities (public or private) which may adversely modify such habitat or may be affected by such designation. Any activities such as habitat alteration or increased water use from Utah Lake and the Provo River could be detrimental to this species and would need to be examined on a case-by-case basis. Additionally, the introduction of exotic species into the June sucker's habitat

along with their associated parasites, could harm the June sucker through predation, competition and possible parasitism. It has been suggested that the Municipal and Industrial System (M&I System) of the Central Utah Project (a Federal project funded by the BR) presently under construction, could impact this species by reducing and changing flows in the Provo River, the major spawning site of the June sucker, and affect portions of Utah Lake resulting in habitat loss for the species while potentially increasing habitat for exotic species. This project and any other Federal activities planned for the Provo River (portion designated as critical habitat), which might affect the sucker or its habitat, would require section 7 consultation to prevent any adverse impacts.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of designating a particular area as critical habitat. The Service has considered the critical habitat designation in light of all additional relevant information obtained. This information was obtained during the comment period, at the public hearing, and from discussions with the Federal, State and local officials cited in the economic analysis. The information concerned flows in the Provo River, flooding of residential areas, dredging of the Provo River, zoning and land uses along the critical habitat portion of the Provo River. With the exception of the M&I System, there is no known involvement of Federal funds or permits for the State, county, city, or private activities within or adjacent to the proposed critical habitat designation.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies, and prohibitions against taking and harm, are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species

that is proposed or listed as endangered or threatened and with respect to its critical habitat. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402, and are now under revision (see proposal at 48 FR 29990; June 29, 1983). Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. Since there is Federal funding involved in the Central Utah Project, formal consultation will be required when this listing and critical habitat designation is finalized.

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that had been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to Section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* of October 25, 1983 (48 FR 49244).

Regulatory Flexibility Act and Executive Order 12291

The Department of the Interior has determined that designation of critical habitat for this species will not

constitute a major action under Executive Order 12291 and certifies that this designation will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*).

No significant economic or other impacts are expected to result from the proposed critical habitat designation. This conclusion is based on BR's awareness of the critical habitat designation and the uncertainty concerning future needs for flow augmentation due to the M&I System; the absence of Federal involvement for State, county, city, and private lands fronting the critical habitat; and the unquantifiable benefits that may result from the designation of critical habitat for the June sucker. In addition, no direct costs, enforcement costs, or information collection or recordkeeping requirements are imposed on small entities by this designation. These determinations are based on a Determination of Effects that is available at the Regional Endangered Species Office, U.S. Fish and Wildlife Service, 134 Union Boulevard, fourth floor, Lakewood, Colorado; and at the Salt Lake City Field Office, U.S. Fish and Wildlife Service, 2078 Administration Building, 1745 West 1700 South, Salt Lake City, Utah 84104-5110.

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List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Regulations Promulgation

PART 17—[AMENDED]

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for Part 17 continues to read as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*).

2. Amend § 17.11(h) by adding the following, in alphabetical order under

"FISHES," to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
FISHES							
Sucker, June	<i>Chasmistes liorus</i>	U.S.A. (UT)	Entire	E	223	17.95(e)	NA

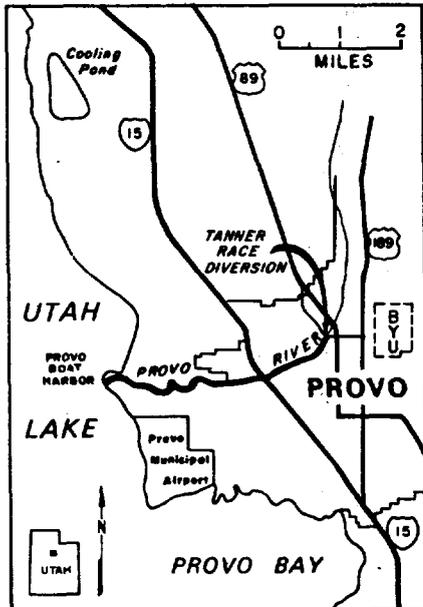
3. Amend § 17.95(e) by adding critical habitat of the June sucker (*Chasmistes liorus*) as follows: The position of this entry under § 17.95(e) will follow the same alphabetical sequence as the species occurs in 17.11.

§ 17.95 Critical habitat—fish and wildlife.

(e) Fishes.

June Sucker (*Chasmistes liorus*)

Utah, Utah County. Provo River, Sec. 5, T7S, R2E; to Sec. 36, T6S, R2E, the lower 7.8 kilometers (4.9 miles) of the main channel of the river as measured from its confluence with Utah Lake, upstream to the Tanner Race diversion.



Known constituent elements of the critical habitat include one to three feet of high quality water constantly flowing over a clean, unsilted gravel substrate. Larval June suckers require shallow areas with low velocities connected to the main channel of the river.

Dated: February 28, 1986.

P. Daniel Smith,
Deputy Assistant Secretary for Fish and Wildlife and Parks.

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